US-PAT-NO: 6008905

DOCUMENT-IDENTIFIER: US 6008905 A

TITLE: Method and apparatus for

determining the appearance of an object

DATE-ISSUED: December 28, 1999

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APPL-NO: 09/ 219132

DATE FILED: December 22, 1998

US-CL-CURRENT: 356/402, 356/405, 356/407,

356/425 , 433/203.1 , 433/26

ABSTRACT:

A method for determining the appearance of an object to be replicated and an

apparatus therefor are described herein. The method consists in providing a controlled illumination to illuminate a surface of the object, measuring the object with a CCD camera to collect an image map of a plurality of points on the surface and processing that information to produce an appearance mapping of the object. Calibration of the apparatus is done by measuring calibration patches illuminated with the same illumination. When the apparatus is made in view of replicating the appearance of an object, a comparison can be done by similarly producing an appearance mapping of the replicate and by comparing it to the appearance mapping of the object.

33 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

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Current US Cross Reference Classification - CCXR (1):

356/405